State telecommunications management manual

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Department of General Services

Telecommunications Division Sacramento, California

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CALNET Fiber Optic Services

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INTRODUCTION

In 1987, the TD contracted for the installation of a fiber optic loop that connects most major state office buildings in the downtown Sacramento area. The fiber optic loop is commonly referred to as the Capitol Area Fiber Loop or the Downtown Fiber Loop.

The loop is constructed of 72 fiber cable, consisting of both multimode and single mode fibers. The cable is arranged to form a continuous loop, with 12 of the 18 buildings being directly attached to the loop. This cabling is typically brought into the main telephone room within each building, and terminates in a fiber optic patch panel. Access to the loop is achieved through the TD using fiber optic jumpers and cross-connects at the fiber optic patch panel.

Originally, only the major State Data Centers installed equipment and provided services via the fiber optic loop. Currently, the TD has installed equipment on the loop as part of their CALNET Fiber Optic Services offering. The TD has a continuing contract to maintain the fiber loop on a seven day a week, 24 hour basis. Also, several agencies within the Capitol area have installed their own equipment between buildings to better connect their organization's Local Area Networks (LANs).

The Downtown Fiber Loop is capable of supporting low speed asynchronous circuits or high speed DS-1 or DS-3 bandwidths and can be used to provide access for mainframe and Internet connections. A limited amount of unused or "dark fiber" is available between specific locations on the loop for agencies desiring to install specialized configurations. Requests to use this "dark fiber" must be coordinated and approved through TD Facilities Engineering.

Availability

Fiber optic services are available to any Sacramento state agency located in a building with access to the fiber optic loop. Contact TD Facilities Engineering for information regarding the availability of fiber optic facilities between specific locations.

The following buildings are located directly on the fiber optic loop:

- The State Capitol and Capitol Annex
- CALTRANS 1120 N Street
- Secretary of State/Archives 1500 11th Street
- Water Resources Control Board 901 P Street
- Energy Building 1516 9th Street
- Bateson Building 1600 9th Street
- OB 8 and OB 9 714 P Street
- Resources Building 1416 9th Street
- EDD Building 800 Capitol Mall
- State Personnel Board 801 Capitol Mall
- OB 1–915 Capitol Mall
- CALNET State Carrier Interface Point (SCIP) 1125 P Street

The following additional buildings have access to the fiber optic loop:

- Central Plant 625 Q Street
- Veteran's Affairs Building 1227 O Street
- Agriculture Building 1220 N Street
- Legislative Office Building 1020 N Street
- Library and Courts 914 Capitol Mall
- Library and Courts Annex 900 N Street
- Education Building 721 Capitol Mall

Rates

There are two main components of cost for connecting to, and utilizing the fiber loop. First of all, there is a nonrecurring charge to connect between the TD fiber patch panel and an agency's specific end-user location.

The TD has a master contract for fiber maintenance and installation services. Agencies may arrange with this contractor to provide a rate for cabling and interconnection to a specific location. Agencies may also hire a vendor to run fiber cable and terminate at their end-user location. However, the TD master contractor must perform all work within the TD patch panels. Contact TD Facilities Engineering to arrange a site evaluation and cost estimate.

The second component is the monthly charge for ongoing use, maintenance and repair of the fiber circuits from their originating to terminating stations and all the connections in between.

A Local Exchange Carrier and Inter Exchange Carrier connection that utilizes the TD's DS-1 and DS-3 equipment is a nontariffed item. The cost for these services is determined in conjunction with the carrier's rate for the balance of the DS-1/DS-3 circuit. Contact CALNET Client Services for current fiber optic service rates.

Ordering Procedures

To order CALNET fiber services, submit a STD. 20 form, stating the locations and type of services required and send it to the Client Service Center. See *Chapter 0799.0*, *Telecommunications Systems & Services Forms Index*.

See Chapter 0101.0, TD Reference Guide, for all TD contact information referenced within this chapter.